

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: FAIL-SAFE

Report Number: P554483

Luminaire Tested: **FUSL-12-2-LD4-1STD-40-UNV-80-85-EDD**

Issue Date: 7/16/2021

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.



**Test Information**

Test Method: LM-79-08  
Report Number: P554483  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2105-257-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/16/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: FUSL-12-2-LD4-1STD-40-UNV-80-85-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND  
.187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

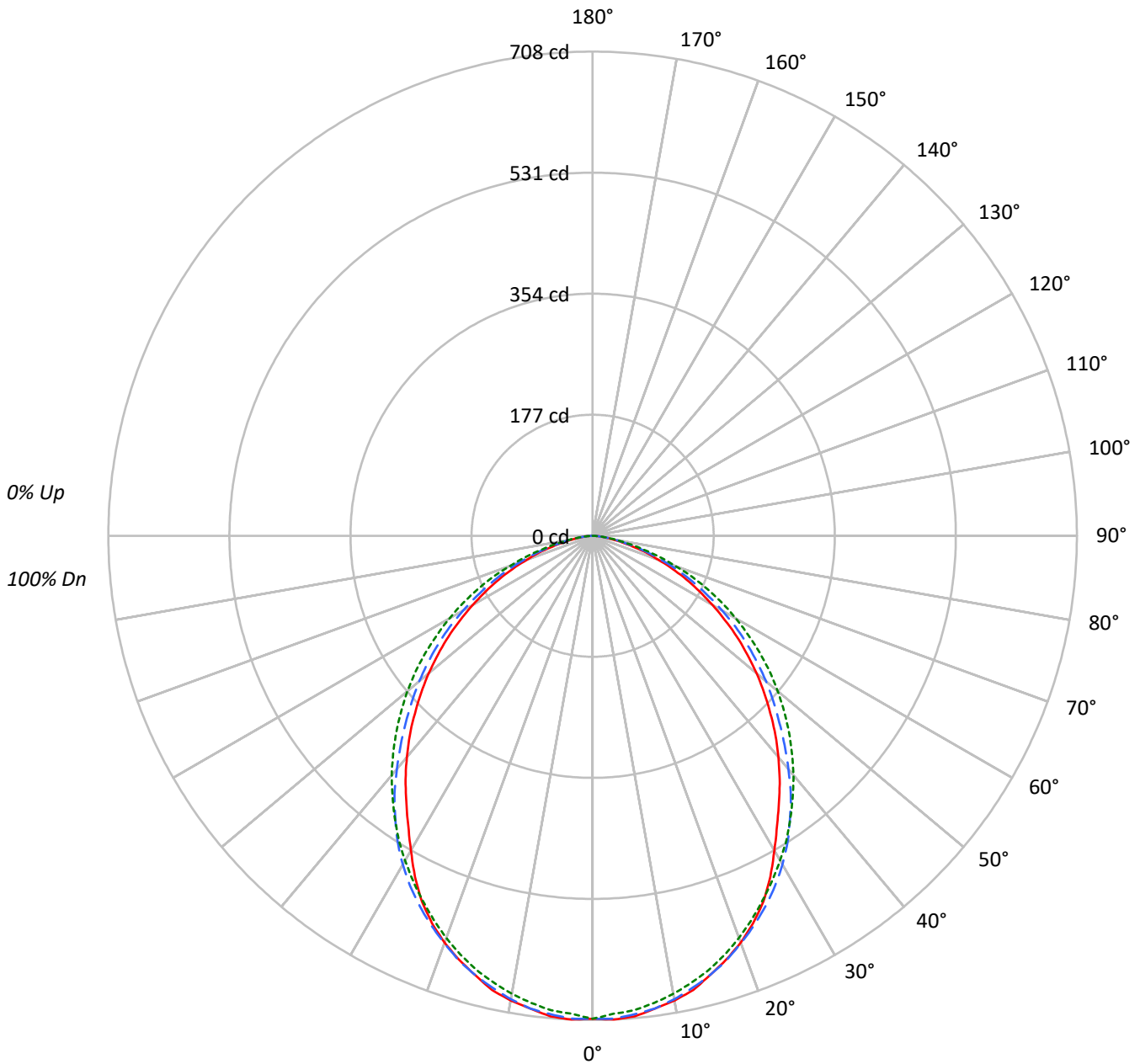
Lumens per Lamp: N/A  
Luminaire Lumens: 1633.0 lumens  
Efficiency: N/A  
Efficacy: 98.4 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 16.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT

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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86																			
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73																			
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63																			
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54																			
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47																			
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42																			
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37																			
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34																			
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30																			
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28																			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3801	3801	3801
5°	3811	3795	3763
10°	3771	3760	3717
15°	3704	3704	3661
20°	3625	3630	3584
25°	3506	3549	3493
30°	3301	3450	3407
35°	3120	3307	3312
40°	2968	3128	3210
45°	2798	2939	3089
50°	2619	2769	2958
55°	2416	2577	2798
60°	2175	2351	2602
65°	1922	2090	2367
70°	1600	1780	2011
75°	1258	1422	1574
80°	899	1001	1110
85°	587	587	556



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	66.5	4.1
10°-20°	186.8	11.4
20°-30°	273.0	16.7
30°-40°	309.9	19.0
40°-50°	299.1	18.3
50°-60°	246.8	15.1
60°-70°	164.3	10.1
70°-80°	73.5	4.5
80°-90°	13.2	0.8
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	526.3	32.2
0°-40°	836.1	51.2
0°-60°	1382.0	84.6
0°-90°	1633.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1633.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	706	706	706	706	706	
5°	705	705	702	699	696	67
15°	665	666	665	662	657	187
25°	590	595	598	593	588	270
35°	475	481	503	506	504	297
45°	368	374	386	404	406	284
55°	258	262	275	290	298	230
65°	151	155	164	176	186	150
75°	60	64	68	72	76	66
85°	10	10	10	9	9	13
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	706.2	706.2	706.2	706.2	706.2
2.5°	708.1	708.4	706.8	702.4	699.7
5°	705.4	705.1	702.4	698.6	696.5
7.5°	697.5	698.1	697.3	691.9	688.9
10°	690.0	690.2	688.1	683.7	680.2
12.5°	680.2	679.9	676.9	674.8	669.1
15°	664.7	666.3	664.7	661.7	657.1
17.5°	649.8	649.8	650.9	645.7	642.2
20°	633.0	633.8	633.8	629.7	625.7
22.5°	613.4	615.9	616.7	612.4	607.5
25°	590.4	595.0	597.7	593.4	588.2
27.5°	562.4	569.5	577.6	574.4	568.7
30°	531.2	541.5	555.1	552.4	548.3
32.5°	501.7	512.0	530.7	529.6	527.4
35°	474.8	481.3	503.3	506.0	504.1
37.5°	449.3	455.3	475.9	482.1	480.5
40°	422.4	428.9	445.2	456.4	456.9
42.5°	395.8	402.1	415.4	431.4	431.4
45°	367.6	373.9	386.1	403.7	405.9
47.5°	340.0	346.5	358.4	376.0	379.6
50°	312.8	318.8	330.7	347.8	353.3
52.5°	284.6	291.1	302.8	318.5	326.4
55°	257.5	261.8	274.6	289.8	298.2
57.5°	229.3	233.3	247.7	260.7	269.4
60°	202.1	207.3	218.4	231.7	241.7
62.5°	176.1	181.5	191.0	202.7	214.1
65°	150.9	154.9	164.1	175.8	185.9
67.5°	126.4	130.0	139.2	147.3	157.9
70°	101.7	106.4	113.1	121.0	127.8
72.5°	81.9	83.8	89.5	95.2	102.3
75°	60.5	63.8	68.4	71.6	75.7
77.5°	43.4	45.3	48.0	50.7	54.5
80°	29.0	29.8	32.3	32.8	35.8
82.5°	17.6	18.2	18.7	19.0	20.1
85°	9.5	9.5	9.5	9.0	9.0
87.5°	5.4	5.4	4.6	3.8	2.7
90°	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-MV3F9LC







— 0°-180°    - - 45°-225°    - - - - 90°-270°







(END OF REPORT)